Backgrounder: Strengthening Protection for Ontario's Air

Ontario has introduced new or updated air standards for 18 high priority contaminants of concern to human health. They are taking effect February 1, 2013. These air quality standards are based on the best available science about the health and environmental toxicology of these contaminants and information about odour.

New/updated Schedule 3 air standards taking effect on February 1st are listed below.

Until 2020, the Ministry will also set Schedule 2 standards for the same contaminants as they are needed for older air dispersion models, and other air monitoring requirements. As of February 1st, air standards for two contaminants (dimethyl disulfide and dimethyl sulphide) will be discontinued: These contaminants are part of total reduced sulphur (TRS) and are captured under the new air standard for this group of contaminants.

- See the full set of Schedule 2 and Schedule 3 air standards

Contaminant	**New/updated Schedule 3 Air Standard** (24 hr average unless otherwise indicated)	**Health Effect** (Critical effects used in setting the standard)
Butanol, n-	920 µg/m^3	reduced body weight
Cadmium and compounds	0.025 µg/m^3	kidney effects; cancer
Chlorine dioxide	2 µg/m^3	respiratory system effects
Chloroethane	5,600 µg/m^3	developmental effects
Dichloroethane, 1,1-	165 µg/m^3	kidney effects
Ethylene Oxide	0.2 µg/m^3	cancer
Hydrogen sulphide	7 µg/m^3 (Note1)	respiratory system effects

	13 µg/m^3 10 minutes	odour effects
Isobutanol	4,600 µg/m^3	neurotoxic effects
Mercaptans	13 µg/m^3 10 minutes (Note 2)	odour effects
Methyl chloride	320 µg/m^3	neurotoxic effects
Phosphoric acid	7 µg/m^3 (Note 3)	respiratory system effects
Propylene	4,000 µg/m^3	respiratory system effects
Sulphuric acid	5 µg/m^3	respiratory system effects
Total reduced sulphur (TRS) NAICS 3221 facilities	14 µg/m^3 13 µg/m^3 10 minutes	respiratory system effects odour effects
Total reduced sulphur (TRS) Other facilities	7 µg/m^3 13 µg/m^3 10 minutes	respiratory system effects odour effects
Trimethylbenzene 1,2,4 TMB orTMB mixtures	220 µg/m^3	central nervous system effects
Trimethylbenzene 1,2,3 TMB or TMB mixtures	220 µg/m^3	central nervous system effects
Trimethylbenzene 1,3,5 TMB or TMB mixtures	220 µg/m3	central nervous system effects

Note 1: The previous air standard for hydrogen sulfide was 30 µg/m^3 (1/2 hr, Schedule 2) and has been updated as 10 µg/m^3(1/2 hr) in Schedule 2 and 7 µg/m^3 (24 hr) and 13 µg/m^3(10 minute) in Schedule 3.

Note 2: The previous air standard for mercaptans was 20 µg/m^3 (1/2 hr, Schedule 2) and has been updated as 10 µg/m^3(1/2 hr) in Schedule 2 and 13 µg/m^3(10 minute) in Schedule 3.

Note 3: The previous air standard for phosphoric acid was 100 µg/m^3 (1/2 hr, Schedule 2) and has been updated as 21 µg/m^3 (1/2 hr) in Schedule 2 and 7 µg/m^3 (24 hr) in Schedule 3.